REMARKS

Claims 1-35 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein. The claim amendments and new claims are fully supported by the application as filed and do not introduce new matter.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sugimoto et al. (U.S. Patent No. 5,777,610). This rejection is respectfully traversed.

With reference to Figure 2, for exemplary purposes only because Applicants' invention includes numerous embodiments, Claim 1 recites, in part, "a driver integrated circuit [27/28] mounted on an extended area [23A] of an edge of the substrate [23]" and "a circuit board [22] having electronic components thereon, said electronic components being provided above said driver integrated circuit [27/28], said circuit board [22] including one of a signal-output terminal portion [22A] and a scanning-output terminal portion [22B] positioned within said extended area [23A] and the other of said signal-output terminal portion [22A] and said scanning-output terminal portion [22B] extending outside said extended area [23A]."

In contrast to the teachings of Claim 1, the Sugimoto et al. reference appears to disclose, with reference to Figure 4, a driver integrated circuit 15/16 mounted to a flexible wiring board 13/19 (Col. 10, Lines 44-54), not to an extended area of an edge of the substrate as claimed. Further, the portion of the flexible wiring board 19 having the driver integrated circuit 16 is mounted to a circuit board 14 that is independent of the

substrates 11a and 11b (Figures 4 and 5). The flexible wiring board 13 is also mounted to the circuit board 14. Still further, the circuit board 14 of the Sugimoto et al. reference, and the electronic components of the circuit board 14, are provided below the driver integrated circuit 16, not above the driver integrated circuit as set forth in Claim 1. Finally, the Sugimoto et al. reference appears to disclose circuit wirings 141 and 142 that connect the circuit board 14 to a control board 17. Neither of the wirings 141 and 142 are output terminal portions positioned within an extended area of an edge of the substrate, as set forth in Claim 1.

As set forth above, the Sugimoto et al. reference fails to disclose or suggest each and every feature of Claim 1. Therefore, the Sugimoto et al. reference fails to anticipate or render obvious Claim 1 and those claims dependent therefrom. Applicants respectfully request reconsideration and withdrawal of this rejection of Claim 1 and those claims dependent therefrom.

With reference to Figure 2, for exemplary purposes only because Applicants' invention includes numerous embodiments, Claim 2 recites, in part, a driver integrated circuit 27/28 mounted on an extended area 23A of the display panel 23, a control circuit board 22 having electronic components thereon, said electronic components being provided above the driver integrated circuit 27/28, and output terminal portions 22A/22B, one of which is within the extended area 23A and the other of which extends outside the extended area 23A.

As stated above with respect to Claim 1, the Sugimoto et al. reference fails to disclose or suggest a driver IC mounted on an extended portion of the substrate, a circuit board having electronic components provided above the driver integrated circuit,

or one output terminal portion positioned within the extended area and another output terminal portion positioned outside the extended area.

The Sugimoto et al. reference fails to disclose or suggest each and every feature of Claim 2. Therefore, the Sugimoto et al. reference fails to anticipate or render obvious Claim 2 and those claims dependent therefrom. Applicants respectfully request reconsideration and withdrawal of this rejection of Claim 2 and those claims dependent therefrom.

With reference to Figure 2, for exemplary purposes only because Applicants' invention includes numerous embodiments, Claim 3 recites, in part, a first extended area 23A/24A, a second extended area 23A/24A, a scanning driver IC 31 connected to said scanning electrodes which is mounted on the first extended area, a data-signal driver IC 27/28 mounted on the second extended area, a control circuit board 22 having electronic components thereon, said electronic components being provided at least above said scanning driver IC or said data-signal driver IC, the control circuit board including a signal-output terminal portion 22A and a scanning-output terminal portion 22B. One of the signal-output terminal portion and the scanning-output terminal portion is contained within a plane region of one of the first and second extended areas and the other of said signal-output terminal portion and said scanning output terminal portion extends outside of the one extended to the other extended area.

As set forth above with respect to Claims 1 and 2, the Sugimoto et al. reference fails to teach or suggest a scanning driver integrated circuit and a data-signal driver integrated circuit mounted on different extended areas that extend beyond the opposing substrate, a control circuit board having electronic components provided at least above

the scanning driver integrated circuit mounted in the first extended area or the data-signal driver integrated circuit mounted in the second extended area, or output terminal portions extending from the control circuit board with one of the terminal portions contained within a plane region of one of the extended areas and the other terminal portion extending outside of the one extended area to the other extended area. Therefore, the Sugimoto et al. reference fails to anticipate or render obvious Claim 3 and those claims dependent therefrom. Applicants respectfully request reconsideration and withdrawal of this rejection of Claim 3 and those claims dependent therefrom.

With reference to Figure 2, for exemplary purposes only because Applicants' inventions include numerous embodiments, Claim 11 recites, in part, a driver integrated circuit 27/28 mounted on an extended area 23A of an edge of the substrate, a circuit board 22 having electronic components thereon, said electronic components being provided above said driver integrated circuit proximate said extended area, the circuit board including one of a signal-output terminal portion 22A and a scanning-output terminal portion 22B being connected to said driver integrated circuit and contained within said extended area while the other of the signal-output terminal portion and the scanning-output terminal portion extends outside the extended area.

As set forth above in the remarks associated with Claims 1 through 3, the Sugimoto et al. reference fails to teach or suggest these features of amended Claim 11. Therefore, the Sugimoto et al. reference fails to anticipate or render obvious Claim 11 and those claims dependent therefrom. Applicants respectfully request reconsideration and withdrawal of this rejection of Claim 11 and those claims dependent therefrom.

With reference to Figure 2, for exemplary purposes only because Applicants' invention includes numerous embodiments, Claim 12 recites, in part, a first extended area 23A/24A and a second extended area 23A/24A, a scanning driver integrated circuit 31 connected to said scanning electrodes mounted on the first extended area, a data-signal driver integrated circuit 27/28 connected to said data-signal electrodes which is mounted on the second extended area, and a circuit board 22 having electronic components thereon, said electronic components being provided at least above said scanning driver integrated circuit mounted in said first extended area or said data-signal driver integrated circuit mounted in said second extended area. The circuit board includes one of a signal-output terminal portion 22A and a scanning-output terminal portion 22B positioned within a plane region of one of the first and second extended areas while the other of the signal-output terminal portion and the scanning-output terminal portion extends outside the other of the first and second extended areas.

As set forth above, the Sugimoto et al. reference fails to disclose or suggest all of the features of amended Claim 12. Therefore, the Sugimoto et al. reference fails to anticipate or render obvious Claim 12 and those claims dependent therefrom. Applicants respectfully request reconsideration and withdrawal of this rejection of Claim 12 and those claims dependent therefrom.

Claim 34 recites, in part, a driver integrated circuit 27/28 mounted directly on an extended area 23A of an edge of the substrate and a circuit board 22 having electronic components thereon, said electronic components being provided above said driver integrated circuit and substantially within said extended area. As set forth above in the remarks associated with Claims 1, 2, 3, 11, and 12, the Sugimoto et al. reference fails to

disclose or suggest these features. Therefore, the Sugimoto et al. reference fails to anticipate or render obvious Claim 34. Applicants respectfully request withdrawal and reconsideration of this rejection of Claim 34.

New Claim 35 recites, in part and with reference to Figure 2 for exemplary purposes only, "a driver integrated circuit 27/28 mounted on an extended area 23A of an edge of the substrate" and "a circuit board [22] having electronic components thereon, said electronic components being provided above said driver integrated circuit [27/28] in an overlapped condition with the driver integrated circuit."

As set forth in the above remarks, the Sugimoto et al. reference, and the other art of record, fails to disclose or suggest a driver integrated circuit mounted on an extended area of the edge of the substrate, as set forth in new Claim 35. Further, the Sugimoto et al. reference appears to disclose a circuit board 14 beneath a wiring board 19 that supports a driver IC 16 (Figure 2). The Sugimoto et al. reference, and the other prior art of record, fails to disclose or suggest a circuit board having electronic components that overlap a driver integrated circuit, as set forth in new Claim 35. Therefore, the Sugimoto et al. reference and the other prior art of record fails to anticipate or render obvious new Claim 35. Thus, Applicants respectfully submit that new Claim 35 is in a condition for allowance.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is

believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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